

**IN THE CLAIMS**

Claims 1-6 (Cancelled).

7. (Previously Presented) A method of manufacturing a solid-electrolyte battery comprising:

forming a first set of gel-electrolyte layers on both sides of a positive electrode collector;

forming a second set of gel-electrolyte layers on both sides of a negative electrode collector;

forming a positive electrode comprising the first set of gel-electrolyte layers on both sides of the positive electrode collector;

forming a negative electrode comprising the second set of gel-electrolyte layers on both sides of a negative electrode collector;

laminating said positive electrode and said negative electrode such that one of the first set of gel-electrolyte layers and one of the second set of gel-electrolyte layers face each other;

winding said positive electrode and said negative electrode such that another one of the first set of gel-electrolyte layers and one of the second set of gel-electrolyte layers of face each other; and

subjecting said wound electrodes to heat treatment so that each of the first set of gel-electrode layers and the one of the second set of gel-electrolyte layers facing each other are integrated with each other into one continuous seamless layer,

wherein,

wherein said gel-electrolyte layers comprise an electrolyte salt, a nonaqueous solvent and a matrix polymer.

8-9. (Canceled).

10. (Original) The method of claim 7, wherein said wound electrodes are subjected to heat treatment for ten minutes.

11. (Previously Presented) The method of claim 7, wherein said gel-electrolyte layers comprise one of LiPF<sub>6</sub>, LiAsF<sub>6</sub>, LiBF<sub>4</sub>, LiClO<sub>4</sub>, LiCF<sub>3</sub>SO<sub>3</sub>, Li(CF<sub>3</sub>SO<sub>2</sub>)<sub>2</sub>N and LiC<sub>4</sub>F<sub>9</sub>SO<sub>3</sub> or their mixture.

12. (Currently amended) The method of claim 7, wherein said matrix polymer is any one of polyacrylonitrile, polyvinylidene fluoroide fluoride, polytetrafluoroethylene, polyhexafluoropropylene, polyethylene oxide, polypropylene oxide, polyphosphagen, polysiloxane, polyvinyl acetate, polyvinyl alcohol, polymethyl methacrylate, polyacrylic acid, polymethacrylic acid, styrene-butadiene rubber, nitrile-butadiene rubber, polystyrene or polycarbonate.

13. (Previously Presented) The method of claim 7, wherein said nonaqueous solvent is selected from the group consisting of ethylene carbonate, propylene carbonate, butylene carbonate,  $\gamma$ -butyrolactone,  $\gamma$ -valerolactone, diethoxyethane, tetrahydrofuran, 2-

methyltetrahydrofuran, 1, 3-dioxane, methyl acetate, methyl propionate, dimethylcarbonate, diethyl carbonate or ethylmethyl carbonate or their mixture.

14. (Previously Presented) The method of claim 7 further comprising inserting said wound electrodes into a film pack.

15. (Previously Presented) The method of claim 14 further comprising subjecting said film pack to heat treatment so that said gel-electrolyte layers formed on said positive electrode and said gel-electrolyte layers formed on said negative electrode are integrated with each other into one continuous seamless layer.

16. (Canceled)

17. (Previously Presented) A method of manufacturing a solid-electrolyte battery comprising:

forming gel-electrolyte layers on both sides of a positive electrode and a negative electrode, wherein one of said solid-electrolyte layers formed on said positive electrode and one of said gel-electrolyte layers formed on said negative electrode face each other;

winding said positive electrode and said negative electrode after pressing; and

subjecting said wound electrodes to heat treatment so that said gel-electrolyte layers formed on said positive electrode and said gel-electrolyte layers formed on said negative electrode are integrated with each other into one continuous seamless layer,

wherein,

wherein said gel-electrolyte layers comprise an electrolyte salt, a  
nonaqueous solvent and a matrix polymer.